

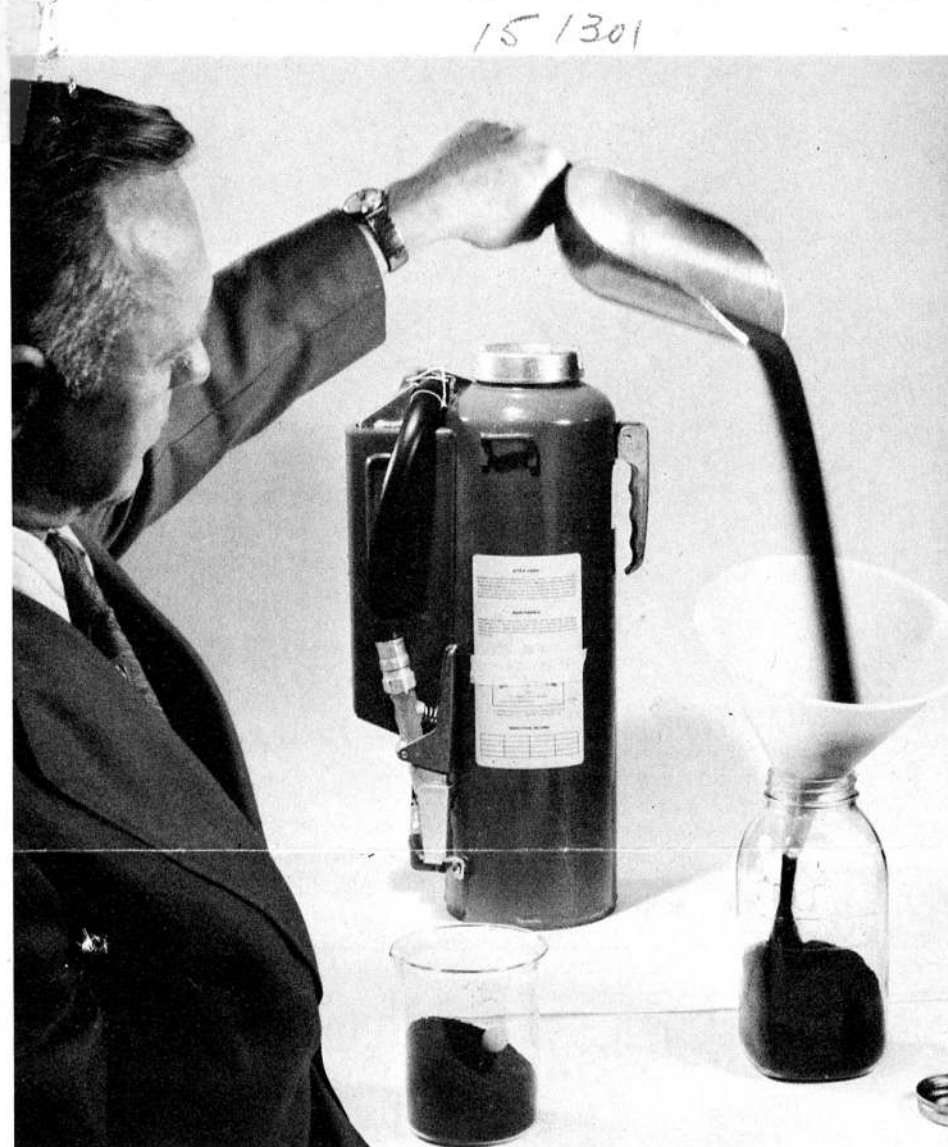


NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 4 - No. 12

June 21, 1973



FLOWABILITY OF CARBON — Y-12 chemist Charles R. Schmitt demonstrates the flowability of carbon microspheres which have proved effective in extinguishing metal fires. The tiny carbon balls, which have a diameter as small as four-thousandths of an inch, can be applied by a pressurized, dry-chemical extinguisher like the one in the rear.

Tiny carbon spheres used to extinguish metal fires

A Union Carbide chemist at the Oak Ridge Y-12 Plant has developed a method of extinguishing metal fires with tiny carbon spheres that can be sprayed through a pressurized nozzle.

The studies were performed by Charles R. Schmitt, of the Chemistry Development Department, with carbon microspheres having a particle diameter of four-thousandths to twenty-thousandths of an inch. The microspheroids were prepared in the laboratory from coked cation resin obtained from commercial sources. They have proved extremely effective in extinguishing fires in combustible metals such as magnesium, sodium and potassium.

Schmitt's experiments have shown that the excellent flow properties of the carbon microspheres through a pressurized, dry-chemical fire extinguisher

nozzle, their chemical inertness, high thermal conductivity and absence of dusting make them more advantageous than graphite flour or commercial chloride and phosphate powders for extinguishing metal fires.

Metal fires are a serious problem when they occur because their intense heat makes them difficult to extinguish. Present means to extinguish such fires consist of dry-chemical fire extinguishers containing specially treated powder. Such extinguishers must be suited to the type of metal involved and the powder often becomes plugged in the hose nozzle. Other disadvantages include the fact that the powder often is highly corrosive to surrounding equipment.

Details of this development are available through the National Technical Information Service.

Production's Engineering nets NSPE high honors

Production Operations' Engineering Division of Union Carbide Corporation's Nuclear Division has been selected to receive the 1973 Industrial Professional Development Award presented by the National Society of Professional Engineers.

The award will be presented at a luncheon in connection with NSPE's 39th annual meeting July 12 in Chicago.

Nominated by the Oak Ridge Chapter of the Tennessee Society of Professional Engineers, Union Carbide was cited for its "record of advancement and improvement of the engineering profession through development and use of forward-looking engineering employment practices in accordance with professional standards."

Professional contributions

Kenneth R. Haeusler, president of the Oak Ridge Chapter, TSPE, said that for

many years Union Carbide has conducted many important activities for its engineers which have contributed significantly to the engineering profession.

Among these he listed:

Union Carbide encourages active participation in technical and professional societies and gives its engineers financial support to attend meetings at the state and national levels.

The company also offers broad opportunities for continuing education and professional growth. It pays a good portion of the tuition, books, fees, and supplies for courses, and may even grant leaves of absence for full-time study.

Union Carbide has sponsored an Engineering Science Review Program since 1968. This program, conducted in-plant during working hours by University of Tennessee professors, prepares engineers for the academic portion of the registration examination. Engineers are given time off, with compensation to take the registration exam.

The Production Operations' Engineering Division conducts a continuing program designed to motivate its engineers to seek registration.

Previous recipients

Previous recipients of the NSPE Industrial Professional Development Award were: Phillips Petroleum Company, Bartlesville, Okla.; Transformer Division, Pittsfield, Mass., and Instrument Department, Lynn, Mass. Bay State Abrasive Products Company, Westboro, Mass.; the

(Continued on page 8)

(Leaders in Engineering accept the award in a photograph on page three.)

Reductions-in-force lower than expected

Staff reduction actions at the Oak Ridge National Laboratory have been completed.

In addition, the Nuclear Division has revised downward from 500 to 400 its estimate of the overall reduction in employment necessary to operate at anticipated fiscal year 1974 funding levels.

While all layoff notices have been issued, some employees affected by the reduction in force will remain on the payroll until the end of June.

In all, fewer than 160 employees actually were laid off. Of the remaining 240, approximately 100 transferred to other Nuclear Division locations, primarily the Oak Ridge Gaseous Diffusion Plant. In addition, more than a dozen employees were placed with the Regulatory Branch of the U. S. Atomic Energy Commission in Bethesda, Md. Nonreplacement of persons retiring, terminating, or volunteering for reduction-in-force benefits accounted for the remainder.

The Nuclear Division is continuing efforts to find jobs for those affected by the layoff. Since February, 13 companies and government agencies have conducted more than 400 employment interviews at the Oak Ridge National Laboratory. While some of these interviews already have led to offers of employment, many offers are still pending.

The actions that have been taken at Oak Ridge National Laboratory will bring the total employment level down to approximately 4,100 by the end of June.

Savings plan checks are available July 2

The 1973 distribution of the General Savings Fund for the Savings Plan will be made to participants on Monday, July 2.

Central Payroll will mail checks to the employees' home address in time to be received on that date.

However, if an employee wishes to pick up his check at the Paymaster's Office or have his check mailed to his bank, he must complete the form, "Authorization to forward savings plan check to Paymaster's Office or deposit in bank." The forms are available at the Paymaster's Office.

These authorizations must be received by Central Payroll by June 22; otherwise, the checks will be mailed to the employee's home address.

Assistance in education aids 'employee-student'

If you are a typist who wants to be an engineer, a chemist who wants to learn programming, or if you just want to become more proficient at what you do, join the other Nuclear Division employees who participate in the Educational Assistance Program.

Brenda Moses is a secretary in the Chemical Technology Division at ORNL. She is taking courses under the Educational Assistant Program to improve her performance on the job and to qualify as a certified professional secretary (CPS). Some of the courses Mrs. Moses has taken include environmental relations, economics, business and public policy, accounting, and communications and decision making. She lives with her two children in Oak Ridge, and has worked at ORNL for a total of seven and one-half years.

Seek degrees

Henry 'Hank' M. Noritake works at ORGDP as a senior development specialist in the Operational Analysis and Long-Range Planning Division. Noritake has degrees in chemical engineering from the University of Michigan, and is presently working on a M.S. degree in engineering administration from The University of Tennessee. An employee of Carbide for over 20 years, Noritake has taken courses in finance, accounting, law and planning.

Wilma J. Payne drives 108 miles two nights a week to attend Murray State University. Employed at the Paducah plant since January, 1972, Mrs. Payne is working on a bachelors degree in business administration. She presently works in the Nuclear Materials Management Services Department. Mrs. Payne is originally from Texas and her husband, William, is a native of Paducah.

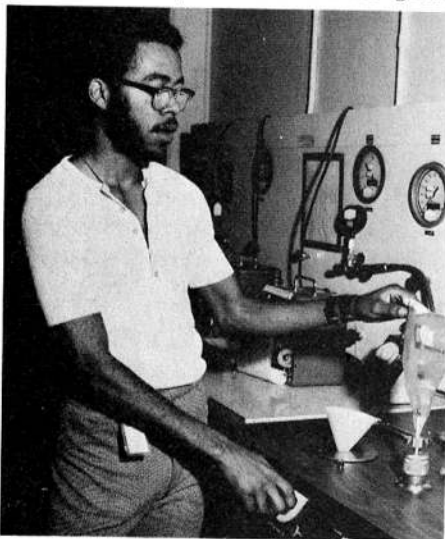
After serving two years in the U.S. Army, Willie H. Scudder is a mechanical inspection trainee in the Mechanical Inspection Department at Y-12. Scudder, who had completed one year of college before entering the service, is currently working on a degree in engineering at The University of Tennessee. Courses he has taken include engineering mechanics, calculus, economics, and English.

Educational institutions

Union Carbide's Educational Assistance Program is designed to encourage employees to continue their educations. The program, which was initiated in

1956, provides opportunity for employees to acquire knowledge by taking courses at different types of educational institutions, such as correspondence schools, trade schools and the adult education program, in addition to colleges and universities.

Any full-time employee is eligible to participate in the Education Assistance Program, regardless of company service credit. However, an application must be completed and approved prior to enrolling in the course(s). Upon completion of the course, the employee must present receipts for expenditures and his grade



Willie H. Scudder, Y-12

report to the Educational Assistance representative at the installation where he works. Reimbursement is normally made by check to the employee's home address.

Half of costs paid

The program pays 50 percent of the cost of tuition, laboratory fees, necessary supplies, required textbooks and the cost of diploma fees. The second 50 percent will be reimbursed to employees who receive a master's or doctor's degree, provided they continue working for the Company, and are actively on the payroll at the time such a degree is received.

Over 500 Nuclear Division employees participated in the Educational Assistance Program during the period August 1, 1972 through January 1, 1973. The number does not include some employees who are striving for self improvement through higher education, but receiving



Mrs. Wilma J. Payne, Paducah

financial aid through some other governmental agency, such as the Veterans Administration. Even these employees may be eligible for some benefits under the Educational Assistance Program.

Reimbursements

The Nuclear Division paid over \$48,500 to employees as reimbursements under the Educational Assistance Program during the period August 1, 1972 through January 1, 1973. A plant-by-plant breakdown follows:

Y-12 Plant, 229 participants - \$22,222.07

ORNL, 140 participants - \$15,771.19.

ORGDP, 130 participants - \$9,982.46

Paducah, 5 participants - \$526.23

Forty-one of the above participants obtained master's or doctor's degrees and were reimbursed the second 50 percent of costs.



Mrs. Brenda Moses, ORNL

July 4 holiday

Wednesday, July 4, is an official holiday for Nuclear Division employees, as the nation's birthday is marked, only three years shy of its 200th birthday!

No employee will be required to be at work, unless his presence is required by continuous operations or the security of the plants.

NUCLEAR DIVISION NEWS

UNION
CARBIDE

Published twice-monthly for
The Employees Of

UNION CARBIDE CORPORATION
NUCLEAR DIVISION

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—Member—

APPALACHIAN INDUSTRIAL
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INTERNATIONAL ASSOCIATION OF
BUSINESS COMMUNICATORS

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Robson named shift supervisor at ORNL



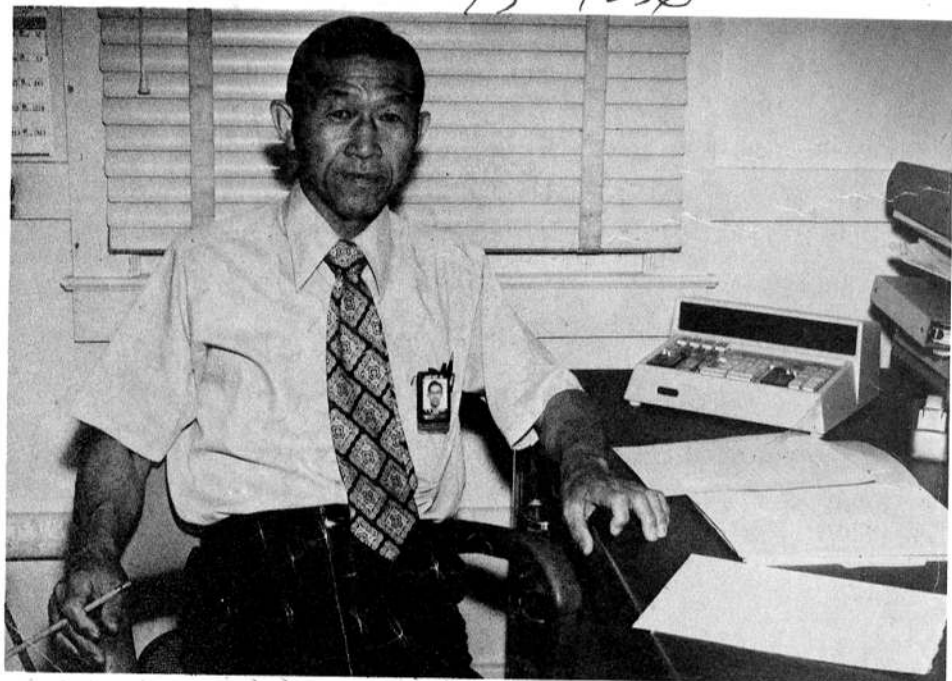
Robson

Robert J. Robson has been appointed a laboratory shift supervisor on "D" shift in the Plant and Equipment Division at ORNL.

Robson joined the ORNL staff in 1960. He has worked as program engineer in Solid State, Reactor Chemistry and Metals and Ceramics Divisions, and was recently a field engineer for the Neutron Physics and Physics Divisions at ORELA and Building 6025.

A native of Lansing, Mich., Robson received the B.S. degree in mechanical engineering from Michigan State University.

He resides at 111 Cumberland View Drive, Oak Ridge, with his wife and six children.



Henry M. Noritake, ORGDP

Paducah names Day to new position

Howard L. Day has been named a process foreman in the Chemical and Power and Utilities Division at Paducah.



Day

He and his wife, Joan, live at 1726 Park Avenue, Paducah. They have a son, Wayne, graduating from Tilghman High School.

Day has many avocations -- summer camping, swimming and fishing. Winters are spent in family tree research, volleyball and other inside sports.

Calendar of EVENTS

TECHNICAL

June 22

Ecology and Analysis of Trace Contaminants Program: "Relationships Between Toxic Element Concentrations and Particle Size in Fly Ash," David F.S. Natusch, University of Illinois. East Auditorium, Building 4500N, 10 a.m.

June 27

ORAU-ORNL Summer Lecture Program: "Toxic Materials in the Environment," William Fulkerson. East Auditorium, Building 4500N, 4 p.m.

July 3

ORAU-ORNL Summer Lecture Program: Panel discussion: "The Ethics of Human Experimentation," Roger Cloutier, Moderator. Panel members, Dr. Gould A. Andrews, M. E. Koons, Carolyn Krause. East Auditorium, Building 4500N, 4 p.m.

COMMUNITY

June 21-30

Oak Ridge Art Center presents Annual Open Show Exhibit. Regular Art Center hours.

June 22-23

Oak Ridge Playhouse presents: "Butterflies are Free." Oak Ridge Playhouse, 8:20 p.m. Admission: adults \$2.50; students \$1.25.

WANTED



ORGDP

RIDE or will join car pool from Clinton to Portal no. 6, straight day. Bob Roe, plant phone 3-3801, home phone Clinton 457-0882.

CAR POOL DRIVER from Inskip-Norwood area, Knoxville, to Portal no. 2, 7:45 to 4:15 shift. R. W. Nichols, plant phone 3-3770, or Knoxville 688-3702; or W. A. Neff, 3-3750, 689-5350.

CAR POOL member or rider from South Knoxville to K-1007 Building, 7:45 - 4:15 shift. K. L. Smith, plant phone 3-3883.

Stelson, Weir named division directors at ORNL as other organizational changes are effective

Several important organizational changes have been announced at the Oak Ridge National Laboratory. All actions will be effective July 1.

Paul H. Stelson will replace Joseph L. Fowler as director of the Physics Division. Fowler, director of the division since 1957, plans to return to experimental physics.

James R. Weir will replace John H. Frye as director of the Metals and Ceramics Division. Frye is retiring from Union Carbide in August and will join the faculty of the University of Alabama at that time.

Formerly at MIT

Stelson joined the Physics Division at ORNL in 1952. In 1963 he was named director of the Van de Graaff Accelerator Laboratory. He received his bachelor's and master's degrees in physics from Purdue University and his doctorate from the Massachusetts Institute of Technology in 1950. From 1950-52 he worked as a research associate at the Laboratory of Nuclear Science at MIT.

Weir joined ORNL in 1955 as a metallurgist and later served as group leader for Metallurgy and as assistant section chief in the Metals and Ceramics Division. He has been credited by experts in the field as the investigator most responsible for the development of corrective methods for overcoming the high-temperature embrittlement of stainless steel and nickel-base alloys resulting from neutronically-generated helium.

Earns Lawrence award

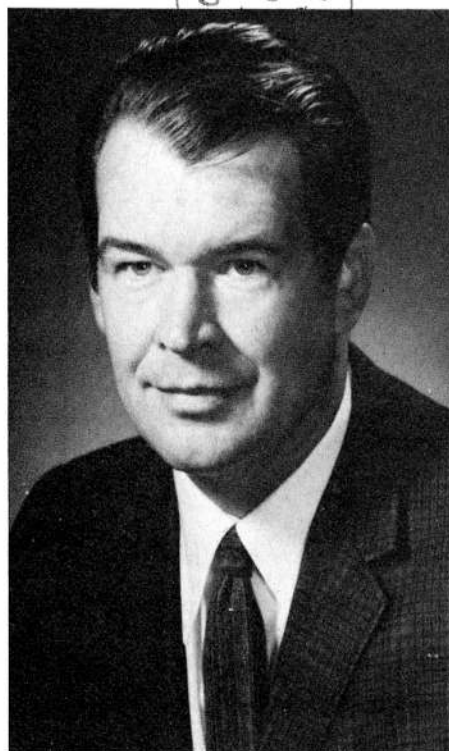
In April, Weir was selected as one of five young U.S. scientists to receive the Ernest Orlando Lawrence Memorial Award presented by the U.S. Atomic Energy Commission.

Other major changes include:

The Budget and Program Planning Office under Robert A. McNees is being expanded as a new Finance and Materials Division, reporting to the Laboratory Director. The new division will have added responsibilities for materials services and personnel accounting services. William O. Graves will be in charge of one new section, Procurement and Materials Control. Ward E. Foster will be in charge of a second new section, Auxiliary Services, with responsibilities similar to those he has had as head of Personnel Services in the Personnel Division.

Consolidated departments

All personnel, administrative functions, plant safety, radiological safety, security, and plant protection functions will be consolidated under the Associate Director for Administration, Frank R. Bruce. To provide a strong focus for safety, radiological protection, security, and plant protection under Bruce, a new position of Manager of Plant Protection and Safety will be created. Robert G.



Paul H. Stelson



James R. Weir

Affel will fill this position. Reporting through him will be: Applied Health Physics and Industrial Safety (part of the Health Physics Division), Laboratory Shift Supervisors, Laboratory Protection Division, and the ORNL Radiation and Safety Review Committees.

Affel joined ORNL in 1951, following graduation from The University of Tennessee with a B.S. degree in electrical engineering. He was originally assigned to the Aircraft Nuclear Propulsion Project and held positions of increasing responsibility until 1961 when he joined the Safety and Radiation Control Department with responsibilities for reactor safety.

Other changes

The Health Division under Dr. Thomas A. Lincoln will report to Frank R. Bruce. Responsibility for University Relations,

Education Programs, and Foreign Guests and Exchange Assignments will be vested in the Personnel Division, reporting to Bruce.

The Long Range Planning Office will become the Program Planning and Analysis Office with expanded functions. In addition to long-range planning, it will review, record, and audit commitments for the research and development programs. The office will be directed by Robert S. Livingston who will report to the Laboratory Director.

The Reactor Chemistry Division, formerly under the direction of Warren R. Grimes, has been dissolved. Basic chemistry research programs have been assigned to the Chemistry Division and the applied chemistry development has been assigned to the Chemical Technology Division. Grimes has joined the Chemical Technology Division.

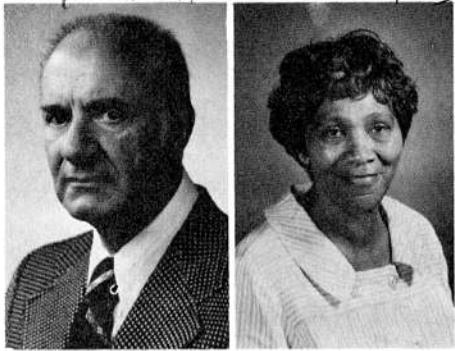


PROFESSIONAL DEVELOPMENT AWARD — The Nuclear Division's Engineering Division in Production Operations has been selected to receive the 1973 Industrial Professional Development Award, presented annually by the National Society of Professional Engineers. Kenneth R. Haeusler, president of the Oak Ridge Chapter of TSPE, right, informs George R. Jasny, center, director of the production plants' Engineering Division, and Finis S. Patton, superintendent of Design Engineering, of the coveted award. Haeusler is head of Special Projects in Y-12.

COMPANY Service

20 25 30

ORNL
30 YEARS



Boch

Mrs. Carter

Alfred L. Boch is head of the Salt Mine Repository Project in the Directors Division. He joined the Tennessee Eastman staff from Berkeley, Calif. Boch was previously involved in cyclotron and reactor technology. In his spare time, he enjoys playing golf. He has two children - a son who is a chiropractor and a daughter who is a nurse.

Thelma M. Carter came to work for DuPont in the Decontamination Department. She is now in the Operations Division. A native of Knoxville, Mrs. Carter enjoys working in her yard, and is very active in church affairs. The Carter home is at 124 S. Vangilder, Knoxville.

cordia College in Moorehead, Minn., and joined the Tennessee Eastman staff in 1943. He and his wife, the former Doris Corbin, have three children. Lee enjoys golfing and gardening in his spare time. The Lees reside at Route 20, Knoxville.



Marshall

Myron B. Marshall Jr., is an electrical engineer in the Physics Division. Originally from Virginia, Marshall came to work at the Y-12 site in 1943. He has two sons in the U.S. Air Force, and a daughter who is a senior at Duke University. In his spare time, Marshall enjoys golfing and farming. He lives with Peggy, his wife, in Karns Community, Knoxville.

ORNL
25 YEARS

William A. Manuel, Radford M. Carroll, James D. Flynn Jr., Paul Crawford, J.C. Davis, William R. Castro, William H. Montgomery Sr., and James R. McNally Jr.

20 YEARS

Joe F. Sharpe, James R. Hensley, Oscar L. Kirkland, Ancil R. Hooks, Irene H. Brogden, O. Wade Christian, Leonard J. Shersky, James A. Bates, Charles E. Everett and Carl J. McHargue.

ORGDP
25 YEARS

Tilman Laxton.

Anne Y. Boring and James R. Sumner.

20 YEARS

James E. Collins, Paul E. Miller, Paul W. Pickrell, Curtis R. Barlow and Ray E. Carnes.

PADUCAH
20 YEARS

Horace B. Hargrove Jr., Annie R. Long, Robert I. Miller, Joe C. Taylor and Robert E. Grant Jr.



Haynes

Neill

Virgil O. Haynes works with the HUD program in the Reactor Division. He came to work for Eastman Kodak Company in 1943. Haynes enjoys boating and fishing. He and his wife, Juanita, live at 166 Northwestern Ave., Oak Ridge.

Frank H. Neill is the Director of ORNL's Quality Assurance Program. He has a degree in mechanical engineering from the University of California, and worked at a radiation laboratory there before coming to Oak Ridge in 1943. Neill's hobbies include camping, hiking and photography. He and Erna, his wife, live at 203 Englewood Lane, Oak Ridge.



Owens

Lee

Ralph C. Owens is a guard captain in the Laboratory Protection Division. He enjoys gardening and golfing in his spare time. He and his wife, Jessie, have two children and five grandchildren. They live at 405 Hardwicke Drive, Knoxville.

DeWayne A. Lee, a chemist in the Chemistry Division, is originally from Pelican Rapids, Minn. He attended Con-



SAFETY AWARD WINNERS — Brad Adkisson, a senior at Harriman High School, has won the Lusk Safety Award from the East Tennessee Chapter of the American Society of Safety Engineers. The award also went to Harriman High School. The school was nominated by Loren Lawhorn, a Y-12 safety engineer, who worked closely with the school in developing and implementing a safety program in their vocational shop classes. The annual award is given to the school which does the best job in fostering safety promotion and application of safe practices. From left are J. K. Bolin, president of the local ASSE, and an AEC safety engineer; Joe Walls, machine shop instructor at HHS and a former Y-12er; Adkisson, and Lawhorn.

2,747 new bond buyers put on payroll deduction plan

A total of 9,471 Nuclear Division employees are now saving through payroll deductions by purchasing U. S. Savings Bonds. These final figures were released recently by Ward E. Foster, general chairman for the 1973 bond campaign in the four installations.

This means that almost 65 percent of all employees purchase bonds regularly, an increase of nearly 15 percent from last year's figures.

The Oak Ridge Gaseous Diffusion Plant leads all plants with an 85 percent count, surpassed only by the General Staff with final reports showing 91.3 percent of them participating!

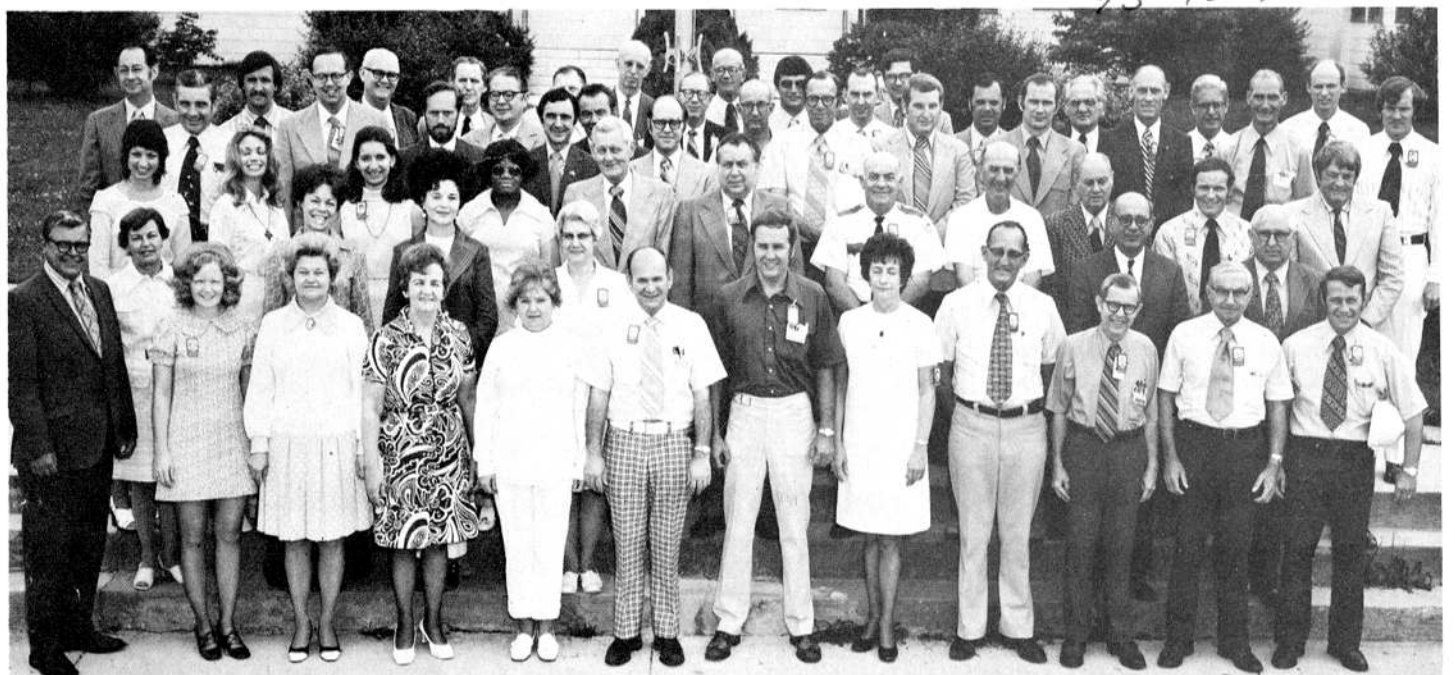
Paducah shows 83.8 percent participation; Y-12 a new figure of 64.8; and Oak Ridge National Laboratory 42.9 percent. Thus, Y-12 now qualifies for the Minute-man Flag. ORGDP will obtain its second star, and the General Staff and Paducah will be awarded their first star to flags earned last year.

Since official drives began in 1970, the count has risen from five percent to the present level of 64.6 percent!

Chairman Foster hailed the work of installation chairmen last week in reporting final participation figures. The chairmen for the 1973 campaign were William E. Schimmel, General Staff; John D. Nicol, ORGDP; James M. Seivers, Y-12; Robroy Millican, Paducah; and John A. Auxier, ORNL.

"They organized their campaigns remarkably well and with able support from division representatives and installation management were successful in substantially increasing employee participation," Foster stated. He also acknowledged the assistance of W. E. Williams of General Industrial Relations for his advice and direction during the drive.

A total of 2,747 new savers were added to the payroll deduction method of purchasing bonds. The ease of savings and tax advantages were emphasized during the 1973 drive.



ORGDP BOND SOLICITORS, 1973, WELL DONE!

Harvey P. Carter will head combined computer facilities

The appointment of Harvey P. Carter as Manager of Computer Sciences for Union Carbide Corporation's Nuclear Division has been announced by Roger F. Hibbs, President of the Nuclear Division.

In his newly-established position, Carter will have overall responsibility for the computing facilities at the Oak Ridge National Laboratory, the Oak Ridge Y-12 Plant, and the Oak Ridge Gaseous Diffusion Plant. He will report to J. Alton Elkins, Manager of Finance for the Nuclear Division.

More efficient service

Commenting on the consolidation of the computing facilities, Hibbs explained that it is designed to provide more efficient service while minimizing costs. Specifically, he said that with the availability of the newly-installed major computing equipment at ORGDP, as well as the various electronic links between all major computers, it is expected that this consolidation will result in more elegant service to all of the system users.

Carter, a native of Memphis, Tenn., received his bachelor's degree in mathematics from David Lipscomb College and his M.A. and Ph.D. from Vanderbilt University.

Headed math division

He was an associate professor of mathematics at David Lipscomb College for four years prior to joining Union Carbide as a senior scientist at Oak Ridge National Laboratory in 1957. He was appointed a group leader in 1959, and served as director of programming services and computer operations from 1962-1964. He was named assistant director of the Mathematics Division until 1969, when he was appointed director of the Mathematics Division.

Among his other activities, he is an associate professor of computer science at The University of Tennessee. His profes-



Harvey P. Carter

sional affiliations include membership in the Association for Computing Machinery and Sigma Xi.

Carter is married to the former Bettye Brown of Paducah, Ky. He, his wife and son live at 8404 Cortland Drive, Knoxville.

Velva Blayney named Kentucky's secretary - of - year by her peers



Velva Blayney

Velva Blayney, a secretary in the Plant Engineering Division at Paducah, has been named Secretary of the Year for the Kentucky Division of the National Secretaries Association. She was selected as SOTY for her local chapter (Paducah-Kentucky Lake) in April, and advanced to state competition.

Mrs. Blayney's selection was based on her educational efforts, company sponsored training programs, her participation in the Certified Professional Secretary

examination, business experience and advancement in profession, NSA and other activities. She has participated in more than 50 hours of company-sponsored training programs covering subjects such as leadership, office courtesy and diplomacy, telephone techniques, corporate organization, report writing, material acquisition procedures, good grooming, defensive driving and home and office first aid.

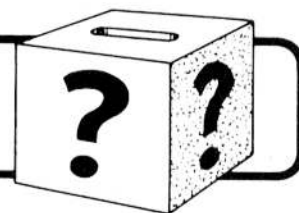
A graduate of Trigg County High School, Cadiz, she also graduated from Draughton's Business College, Paducah, and has done work at Paducah Community College, as well as in the adult education classes at Tilghman Area Vocational School.

A charter member of the Paducah-Kentucky Lake chapter of NSA, she served as its first program chairman, and has held many other committee jobs since that time.

She and her husband, Joseph, live at 2909 Broadway, Paducah, where they are active in the Westminster Presbyterian Church. She is also a member of the Epsilon Sigma Alpha International sorority, where she has served as a past international president.

Following the announcement of the award, Mrs. Blayney was presented a silver tray and a certificate. She has been nominated to the Southwest District as SOTY to represent the Bluegrass State.

QUESTION BOX



If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. (Or telephone it in to your plant news representative . . . see page two). You may or may not sign your name. It will not be used in the paper if you so desire.

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: At the end of December, 1972, a weekly employee had a time card incorrectly filled out, so pay was withheld until the first week in January. But the social security was taken out at the higher 1973 rate for the hours in question, which had been worked in 1972. This loss of income does not seem quite right. Is there a recourse?

ANSWER: According to the Tax Department of Union Carbide Corporation, the cut-off date for 1972 social security taxes for employees who receive their paychecks each week was December 24, 1972. Social Security taxes for any earnings after December 24 have to be calculated at the 1973 tax rate of 5.85 percent, regardless of when the paycheck is received.

In your case, if the hours in question were worked before December 24, the Central Payroll Department will be glad to make an adjustment if you will call W.M. Mills at 3-3616.

QUESTION: If neither economic status nor nepotism is a factor in hiring employees, just how did it happen that a department head at the Paducah plant has his two sons-in-law working under him? I'm sure other applicants were just as qualified and perhaps more qualified.

ANSWER: The Paducah management reports that to the best of their knowledge such a condition does not exist at Paducah. One department head does have one son-in-law working for him but the employee in question was working in the department before his marriage. It is Nuclear Division policy to hire the best qualified applicant for an opening. In applying this policy we do not discriminate in favor of nor against an individual because of relatives who may be already employed.

QUESTION: The Technology Mobilization and Reemployment Program initiated in April, 1971, by the Department of Labor has been a success in reducing unemployment among technical professionals.

Is Union Carbide's Nuclear Division working with the Department of Labor to reduce unemployment among the technical people about to be terminated?

ANSWER: The U.S. Department of Labor Technology Mobilization and Reemployment Program has been fairly successful in reducing unemployment among professionals. Its efforts have been concentrated primarily in geographical areas where large layoffs have occurred in the aerospace and electronics industry during the past two years. It has not operated in this geographical area nor has it worked

with Union Carbide in connection with recent layoffs.

The Nuclear Division's placement program for the professional staff has been specially geared to the occupational backgrounds of the employees involved. The approach has been to contact, by phone or letter, all organizations within the nuclear industry, and other industries where openings exist that fit the individuals available for employment.

QUESTION: I recently received a ticket for parking my motorcycle in a no parking zone just north of the guard house at the Bear Creek Portal at Y-12. Not owning this cycle very long, I wasn't aware of plant regulations on parking. I asked why the plant couldn't mark off an area for motorcycles near the guard house. I was told to park in a car space. This could result in damage to the cycle. I am on three shifts and it is impossible to find an empty space close to the guard house. If we park in the north end of the lot or the far west lot, they would surely get stolen.

I have noticed that payroll men park their truck in this no parking zone. If the "no parking" rule applies to cyclists, it should apply to everyone. I don't think it would cost much to mark off a small area for the motorcycles.

ANSWER: A parking place for cyclists has been established at the West Portal Parking Lot near the guard portal. Parking space is planned in the near future at all major parking lots at Y-12 as needed for motorcycles. These designated spaces will be near the portals if space is available.

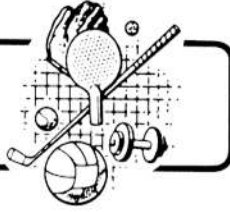
QUESTION: About a month ago I tried to cash a check at the Cashier-Company Store at ORGDP, and was told the check was too large. More recently I tried to buy an article, and they would not accept my check, stating it was too small. Are there outer and under limits on checks?

ANSWER: The cashier at the Oak Ridge Gaseous Diffusion Plant is authorized to cash personal, payroll, and credit union checks for all Company employees. There is no minimum limit on the amount of these checks, however, in the case of personal checks, there is a \$200 maximum.

WHAT WE COULD DO

Right now, without learning a new thing from the research laboratories we could save over 100,000 additional lives this year from cancer, if everyone got the American Cancer Society's message about the importance of early diagnosis and prompt, proper treatment, and had regular health checkups.

RECREATIONOTES



FISHING RODEO

E, F, G, H and J Shiftmen from Y-12 chose June 9 for a big fishing rodeo on Norris Lake. W. B. Motley took two prizes, one for catching the largest largemouth and a door prize from Martin's Bait House. Benny Rains caught the largest walleye; as George Riggs and W. W. Davis took prizes for walleyes too. C. F. Butler and C. Matheney took awards for largest smallmouths.

PADUCAH SWIMMING PROGRAM

Paducah employees are invited to participate in the swimming program, set to begin June 23 and continue each Saturday through August 25 at Noble Park Swimming Pool. Hours are from 9 a.m. to noon. Employees and families admitted free of charge. A life guard, pool management and basket service are provided.

CARBIDE BOWLING

The Oops team leads the Carbide Family Mixed Bowling League early in the summer race, tied with the Aristocrats. Both teams have lost only one point thus far in the eight-team race.

SOFTBALL

The Colts and All Stars remain the only two teams in Softball with a spotless slate, after five weeks of play. Another five teams have sustained only one loss, as the race heats up.

League standings follow:

Team	W	L
Colts	5	0
All Stars	4	0
Buccaneers	4	1
Snakes	3	1
Tom's Gizzards	3	1
Centaurs	2	1
Gashouse Gang	2	1
Red Barons	3	2
Yellow Jackets	3	2
Computes	3	2
K-25 Mech's	3	3
Ecology	2	2
Supersonics	2	2
Raiders II	2	2
Losers	2	3
Bio Rejects	1	2
Hornets	2	4
AI's Pals	1	4
Playmakers	0	4
Bombers	0	5
Gene's Gang	0	5

FOLK DANCING

The Oak Ridge Folk Dancers meet during the summer on Wednesday from 7 to 10 p.m. in the Social Room of the Civic Center in Oak Ridge. Anyone interested should come at 7 p.m. each Wednesday. A small fee is charged. More information may be obtained from Charles Klabunde, Oak Ridge telephone 483-8055; or Janet Klein, 482-1243; or Ruth Young, 483-7251.

ENGINEERING PICNIC

The Production Operation's Engineering Division gave a gala picnic June 2 at Clark Center Recreation Park, ushering in the Spring season. They had good reason to celebrate, too. Word had just come that they had captured the Industrial Professional Development Award from the National Society of Professional Engineers. Part of the happy crowd can be seen at left.

HI POWER RIFLE LEAGUE

Jack Mrochek, ORNL, took the second match in the All Carbide High Power Rifle League with a 470. Y-12's Jack Huff fired a 465 and ORGDP's A. A. Abbatiello scored a 458. Other scores were Elmer Johnson, Y-12, 457; Carl Brewster, Y-12, 454; Don Kiplonger, ORNL, 451; Lawrence Weston, ORNL, 450; W. I. Galyon, Y-12, 449; Hugo W. Bertini, ORNL, 440; W. Morrison, ORNL, 392; and Joe S. Crowell, ORNL, 382.

SKEET LEAGUE

Y-12's Alan Van Hull scored top in the May Skeet League, taking a 49.377 score. His fellow Y-12ers R. Strickland and P. Prewett placed second and third with scores of 48.560 and 47.929 each.

ALL CARBIDE GOLF

The biggest news in golf circles centers on Y-12's Jim Loupe, firing in the Melton Hill League Play June 5. Jim picked up a hole-in-one on hole five at Melton Hill, using a wedge on the par-three hole!



Loupe

Witnesses and co-players Herm Stewart, Frank Tiller and Ray Holloway were about as excited as the star was in what is believed to be the first ace ever picked up in plant competition.

In the South Hills race the new team of Rutherford and Watson has let other players know they came to play. In four matches, they have lost only two points. Charley Baxter of the Sise-Baxter duo recently fired a low scratch score of 36 for the nine holes at South Hills.

Southwest Point shows Patrick-Bufington in the lead in the J Shift race, edging out Lay-Creswell by a mere point. Phillips-Winters came in third place.

In the regular South Hills League Smiddy-Gilchrist takes a two-point lead over Waldrop-Babb. R. Graham, of the Graham-Cozart pair scored low of the week with a 40.

D Shift's Golf League features a tie between Smith-Rogers and Sharpe-Rose.

WANTED



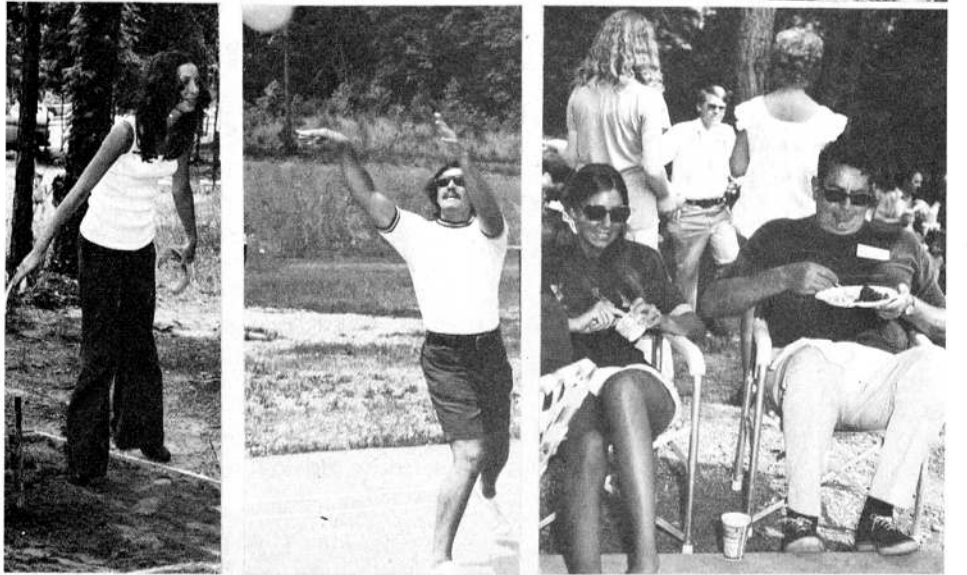
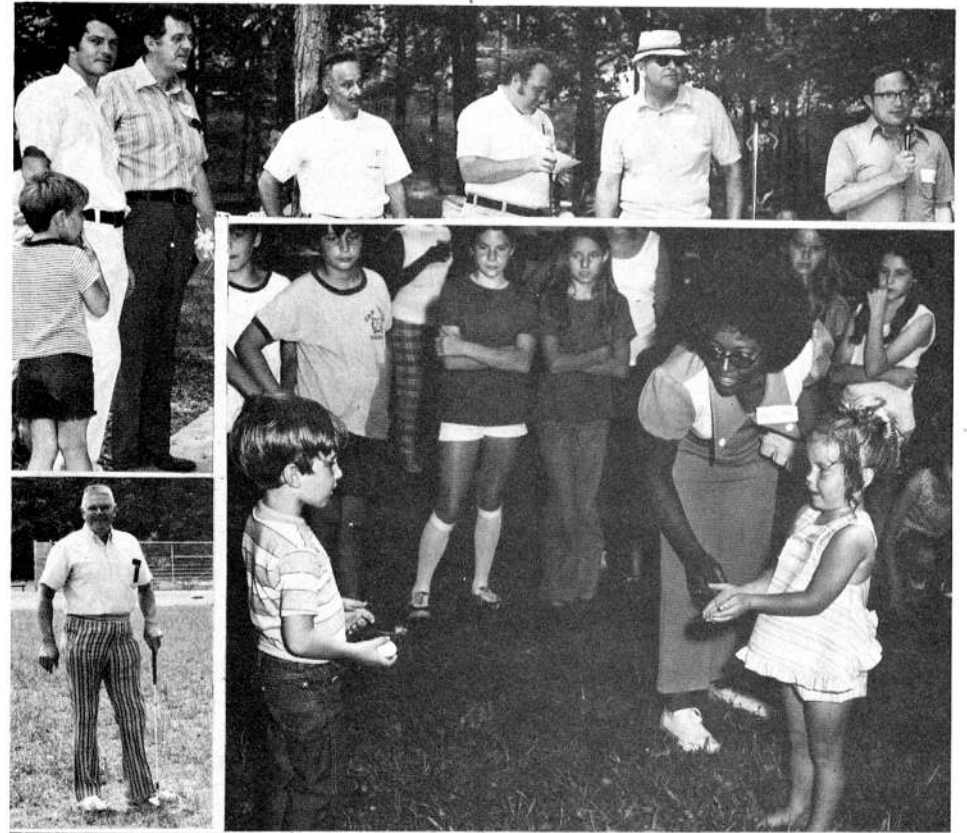
Y-12 PLANT

RIDE from Coster Road, Inskip area, Knoxville, to North Portal, straight day. Becky Cooper, plant phone 3-7283, home phone Powell 947-4111.

ORNL

RIDERS from East Village (Arrowwood Road vicinity) to North or West Portal, 8 a.m. shift. W. Noland Baird, plant phone 3-6535 or Oak Ridge 483-3969.

TWO CAR POOL MEMBERS from vicinity of Waddell, West Outer or Pennsylvania to East or North Portal, 8:15 shift. Tom Burnett, plant phone 3-6929 or Oak Ridge 483-1975; or Dick Reed, plant phone 3-1801 or Oak Ridge 483-3458.



Acid factory in the stomach

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

Have you ever wondered how a dog can gulp down raw meat mixed with large chunks of barely chewed bone? Ever see a snake eat a mouse whole without even chewing? How about your teen-age son quaffing several sausage and cheese pizzas, a large tossed salad with blue cheese dressing and then topping it off with three pieces of pie ala mode, all in less than 10 minutes!



Obviously the healthy stomach has a fantastic capacity to break down seemingly almost indigestible food without the slightest discomfort to its owner. As a matter of fact, that mass of highly seasoned pasturage usually produces a pleasant satisfied feeling while it is being digested. The chemical processing of food in the stomach is clearly a medical marvel.

To get away with eating the food animals and men do, their stomachs produce amazing quantities of acid. The one and one-half billion parietal cells which line the stomach can produce a cup of .17 normal hydrochloric acid per hour. Quantifying the strength of that amount of acid in nontechnical terms is difficult, but it would be about 100 times as much acid as pure lemon juice.

Could 'eat' zinc

The concentration of the acid when it is formed is about a .6% solution (160 - 180 millimoles per liter). When it enters the lumen of the stomach it is rapidly diluted to about a .4% solution (100 millimoles per liter). Although that may seem weak, it has a pH of 1. (A pH of 7 is neutral while pH's below 7 are progressively more acid and above 7 are more basic.) That amount of acid could easily eat a hole through a zinc battery plate or dissolve a ceramic pitcher, yet it doesn't even irritate the lining of a healthy stomach.

Also of considerable importance to both digestion and indigestion is the effect of the enzyme pepsin secreted by the chief cells in the stomach's lining. Pepsin digests proteins much more efficiently than, for example, the tenderizer housewives often put on their meat or the rennin they use to curdle milk while making junket. When in an acid environment, pepsin efficiently breaks up complex proteins into peptides ready to be further broken down and absorbed in the small intestine. If the stomach is deficient in acid, pepsin is not effective so all the breakdown has to occur in the small intestine. Lots of acid as well as pepsin are necessary for a healthy digestive system.

Acid not only culprit

The stomach doesn't digest itself primarily because of the protection of mu-

cus. The patient with a peptic ulcer or the less severe but distressing acid-peptic disease, or chronic indigestion, may have many problems in his stomach. It is not fair to blame them all on excess acid. Of equal importance are how rapidly the stomach empties its contents into the duodenum (the first portion of the small intestine), the quantity and quality of the protective mucus barrier and the efficiency of the various servomechanisms which regulate the flow of the gastric juices.

The signal for acid to flow in the stomach comes from the brain and the stomach. Drinking, smelling and tasting good food when one is hungry starts the acid flowing. After the food neutralizes the gastric acidity and stretches the stomach walls, it causes the release of a hormone called gastrin into the blood. It, in turn, further stimulates the parietal cells to secrete more acid. When the acid content reaches a high enough level, the gastrin secretion slows down again until needed later when more food is eaten.

More acid released

The role of this hormone in causing peptic ulcer has been under intense investigation for several years. Some feel that the traditional frequent feedings and antacid medicine, though often successful, are not entirely logical. These two treatments stimulate the release of gastrin which in turn stimulates the release of more acid. The fundamental problem seems to be a failure of a complex feedback mechanism. The signals probably initially get mixed up due to physical or psychological stresses but once they are thrown out of phase, getting them back in order is difficult. Hopefully, someday someone can learn how to really effectively slow down the gastrin mechanism without resorting to surgery.



ENGAGEMENT — Kenneth T. Brown, Y-12's Alpha Five West Shop, announces his engagement to Miss Betty Jo Westcott, Route 2, Harriman. She is the daughter of Roy M. Westcott, who also works in Y-12. The couple will be married June 29 at Pine Ridge Baptist Church.

Oak Ridge Gaseous Diffusion Plant promotes eight to new responsibilities

The Oak Ridge Gaseous Diffusion Plant announces eight recent promotions. Mary F. Delozier has been named an associate production engineer in Operations Planning.

Mrs. Delozier, a native of Pittsburgh, has a B.S. degree in chemical engineering from Carnegie-Mellon University.



Mrs. Delozier

Edwards

She and her husband, Randall, live at 326 West Vanderbilt Drive, Oak Ridge. She is a member of the Pilot Club of Oak Ridge.

Ernest Edwards has been appointed a supervisory trainee in Cascade Operations.

He has been at ORGDP 28 years, and is a native of Harriman. He served in the Marine Corps during World War II.

Married to the former Vivian Ruffner, he lives at Route 4, Harriman, with his two sons, Steve and Mike. Edwards enjoys all types of sports, especially golf.



Mrs. Franklin

Mrs. Frizzell

Patricia V. Franklin, a native of Atlanta, has also been named an associate production engineer in Operations Planning.

She attended Emory University and graduated from The University of Tennessee with a degree in nuclear engineering.

Mrs. Franklin worked as a co-op student in Barrier Development at ORGDP and in Nuclear Safety in Y-12.

She and her husband, David, live at 818 West Hill Avenue, Knoxville. She enjoys tennis and watching basketball and football. She also enjoys reading and cooking.

Bonnie White Frizzell has been named an electronic data programming aide in Computer Programming and Budgets.

Born in Oak Ridge, she graduated from Roane County High School and is presently attending Roane State Community College.

Mrs. Frizzell has a three-year-old daughter, Teresa. They live at 1385 Byrd Circle, Kingston, where she enjoys horseback riding, swimming and skiing.



Heidle

Holmes

Browder E. Heidle, a native of Wartburg, has been named a maintenance foreman in the Instrument Department.

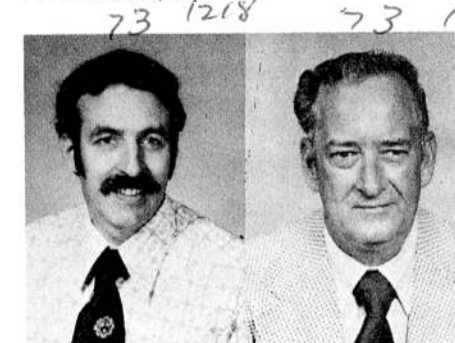
He has been at ORGDP more than 28 years, working as a glassblower and instrument mechanic. He attended Central High School in Wartburg as well as UT, and is a graduate of the Vocational Electronics School in Wartburg.

Heidle and his wife, the former Laura Wilson, live at Route 1, Wartburg. They have a son, Jeffrey, and a married daughter, Sharon Redmon. For pastime Heidle enjoys hunting, horseback riding and gardening.

William Holmes Jr. has been named a laboratory supervisor in Separations Systems.

A native of Memphis, Holmes attended Tennessee State University. He has been at ORGDP four years, and worked as an aircraft assemblyman and inspector before joining Union Carbide.

Holmes lives at 222 East Drive, Oak Ridge, with his wife, the former Lenice A. Buttram and their three children, Jacquelyn, Kristal and William. In his spare time he races and repairs autos and rides motorcycles.



Horne

Roes

Robert E. Horne Jr. has been named a laboratory supervisor in Separations Systems also.

A native of Lansing, Ill., he graduated from Calumet City (Ill.) High School and attended UT, majoring in engineering. He came to ORGDP in 1963.

The Horne home is at Route 17, Guinn Road, Knoxville. Mrs. Horne is the former Margie Matlock, and they have three children, Susan, Cindy and Bob. Horne enjoys home building (he and his wife built their own home), tinkering with tractors and "hobby" farming.

William L. Roes, a native of Union, S.C., has been appointed a supervisory trainee in Cascade Operations.

He has been at ORGDP 28 years, and was in the U.S. Army from 1940 until 1944.

He is married to the former Eva Mae Amos, who works as a nurse at Roane Electric Furnace, in Rockwood. They live at 816 Lakeview Drive, Kingston, and have four children, Mary, William, James and Susan.

Roes plays golf and fishes in his spare time.

Next Issue

The next issue will be dated July 5.
The deadline is June 27.

Division Retirees



Wilson
N 73-34

Kennedy
N 73-39



Winters

Drumwright
N 73-37



Lankford

Wilkerson



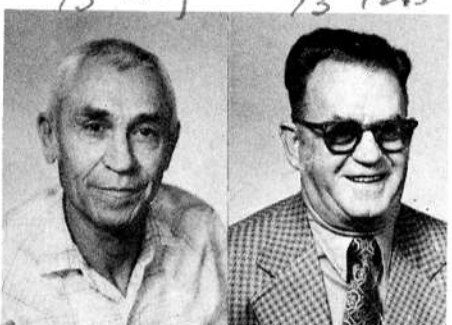
Blankenship
73 1130

Forrester
73 1129



Lunn
73 1219

Dillon
73 1215



Duff

Williams

Nine Y-12ers retire at the end of June with more than 200 years combined total years of employment with Union Carbide.

Roland Y. Drumwright, a foreman in Tool Grinding, came here in 1948. He lives at 4920 Jonquil Lane, Knoxville.

Lee F. Kennedy, a foreman in Research Services, lives at 114 East Malta Road, Oak Ridge. He joined Union Carbide in 1947.

Lyle G. Lankford joined Union Carbide in 1944. He lives at 9224 Happy Lane, Oak Ridge. He works in Alpha Five West Shop.

Leonard H. Wilkerson, Stores Department, lives at 1011 East Second Avenue, Lenoir City. He came to Y-12 in 1951.

Constant C. Wilson, also in Y-12 Stores, joined Union Carbide in 1954. He lives at 508 Pennsylvania Avenue, Oak Ridge.

William L. Winters, Chemical Services, came to Y-12 in 1951. He lives at 141 Arkansas Avenue, Oak Ridge.

Herman P. Alexander, General Machine Shop; Vertner H. Culberson, General Can Fabrication Shop; and Howard W. "Paddy" Peckman, Building, Grounds and Maintenance Shops were unavailable for photographs recently.

Alexander lives at 214 Waltham Place, Oak Ridge, and joined Y-12 in 1954.

Culberson joined Union Carbide in 1943. He lives at 100 Fulton Lane, Oak Ridge.

Peckman, a former professional baseball player, came here in 1950. He lives at 511 West Vanderbilt Drive, Oak Ridge.

Five men from ORGDP will retire at the end of June, and two additional employees retired at the end of May.

Hoke S. Blankenship, an electrical mechanic in Fabrication and Maintenance, retires this month. He came to ORGDP in 1945 and lives at Route 2, Kingston.

O. H. Dillon, a planner and estimator in the Maintenance Engineering Department, left the last of May. He hired in early in 1945 and lives at 101 Norwood Lane, Oak Ridge.

Martin C. Duff, a heavy equipment mechanic in the Garage, will retire this month. He lives at Route 6, Harriman. Duff came with ORGDP in 1944.

Earl J. Forrester, a supervisor in the Toll Enrichment Facility, will also retire this month. Joining Union Carbide in 1944, he lives at Route 3, Kingston.

Harold H. Lunn, a maintenance supervisor in Maintenance Engineering, lives at 601 Crestwood Lane, Clinton. He joined ORGDP in 1944 and retired at the end of May.

Ernest G. Williams, an electrical mechanic in Fabrication and Maintenance, retires this month. He lives at 122 North Douglas Avenue, Rockwood, and came to ORGDP in 1945.

Lacy H. Jones, in Cascade Operations, joined ORGDP in 1944. He retires this month to his 100 Ivanhoe Road, Oak Ridge, home.

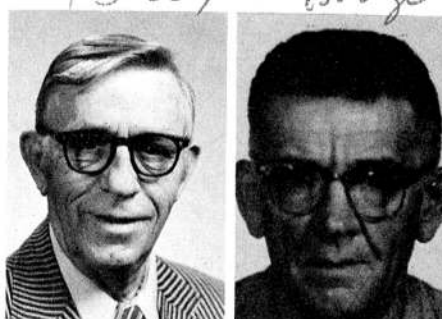
Robert K. Browning, a project engineering supervisor in the General Engineering Division at ORNL, recently retired. He had over 27 years of company service. The Browning home is at 108 W. Overlook, Oak Ridge.

Engineering

(Continued from page 1)

Engineering Department of E. I. duPont de Nemours & Co., Inc., Wilmington, Del.; ARO, Incorporated, Arnold Air Force Station, Tenn.; Tennessee Eastman Company, Kingsport; Reynolds Tobacco Company, Winston-Salem, N.C.; The Kodak Park Works Engineering Division of the Eastman Kodak Company, Rochester, N.Y.; Florida Power & Light Company, Miami, Fla.; Pennsylvania Power & Light Company, Allentown, Pa.; Battelle Memorial Institute, Columbus, Ohio; Coca-Cola Company, Atlanta; and Mellon-Stuart Company, Pittsburg.

The two words "information" and "communication" are often used interchangeably, but they signify quite different things. Information is giving out; communication is getting through.
—Sydney J. Harris.



Harvey

Comisak

Frederick M. Harvey, a 20-year Union Carbide veteran, retired May 31 from Y-12's Utilities Department. He lives at Route 2, Paint Rock Ferry Road, Kingston.

John H. Comisak, a 20-year Carbide veteran, retires from the Paducah Plant, to his Route 3, Paducah home. A veteran of the U.S. Maritime Service during World War II, Comisak is a native of McKees Rock, Pa. He plans an active retirement at his Metropolis-Mayfield Road home.

Division Deaths

Julius J. (Jay) Holzknecht, a general foreman in Y-12's Process Maintenance, died in Oak Ridge June 4.

A native of Louisville, Ky., he joined Union Carbide June 23, 1947. He had served in the U.S. Navy during World War II.

Survivors include his wife, Mrs. Eileen Ruffi Holzknecht, 114 Marshall Circle, Oak Ridge; daughters, Cheryl Holbrook and Lee Ann Holbrook; sons, Michael, Brad and Julius III.

A funeral mass was held at St. Mary's Catholic Church, with the Rev. James Bowling officiating. Burial followed in Anderson Memorial Gardens.

RETIRED ORNL ENGINEER

Henry J. Buttram died at his home in Piedmont, Ala., on May 27. Mr. Buttram was a staff engineer in the Isotopes Division at ORNL until his retirement in November, 1971. Funeral services were held at Nicholson M. Brown Funeral Home in Piedmont on May 29.

COMPANY Service

20 25 30

Y-12 PLANT 25 YEARS

Roy E. Shelton, Harold C. Borum, William E. Phillips, Ralph E. Graham, Garland P. McGhee, Robert L. Hazlett, James L. Watkins, George L. Oliphant, Earl D. Eagle and George L. Howard.

20 YEARS

George T. Wellborn, Rufus T. Hill Jr., Charles Carson, Roscoe C. Rowan Jr., James W. Jenkins Jr., Earl W. Leach and Floyd W. Kyte.



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NUCLEAR DIVISION

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